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July 29, 1993

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
Room 222
1919 M Street, N.W.
Washington, D.C. 20554

Re: ET Docket No. 93-198, Preparation for International Telecommunication Union World Radiocommunication Conferences

Dear Mr. Caton:

Attached is the original and required copies of the Reply Comments of Loral Qualcomm Satellites Services, Inc., in the above-captioned proceeding.

Please contact the undersigned if you have any questions.

Sincerely yours,

Leslie A. Taylor

Attachments

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

100-100000-1

JUL 29 1993

In the Matter of)

Preparation for International)
Telecommunication Union)
World Radiocommunication)
Conferences)

ET Docket No. 93-198

REPLY COMMENTS OF LORAL QUALCOMM SATELLITE SERVICES, INC.

Loral Qualcomm Satellite Services, Inc., ("LQSS"), by its attorneys, hereby submits its Reply Comments in the above-captioned proceeding.

I. Introduction

LQSS, in its initial Comments in this proceeding, urged the Commission to recommend a United States position for the 1993 World Radiocommunication Conference (WRC-93) to establish agendas for upcoming WRCs that would promote the implementation of Mobile Satellite Service (MSS) and the use of the allocations made for MSS at the 1992 World Administrative Radio Conference ("WARC-92").

In particular, LQSS proposed that the United States ensure that the following be addressed at near-term International World Radiocommunication Conferences:

- (1) acceleration of the worldwide availability for MSS of spectrum in the 2 GHz band;
- (2) reconsideration of the secondary downlink allocation of 1613.8-1626.5 MHz for MSS;
- (3) new allocations of feeder link spectrum for MSS systems, particularly for non-GSO systems;

(4) revision of Footnote 731E to confirm the primary status of MSS in the 1610-1626.5 MHz band;

(5) increase in the power-flux density limit for the 2483.5-2500 MHz band; and

(6) review of Radio Regulation 2613 to remove any question concerning the status of non-geostationary satellite systems vis a vis geostationary fixed-satellite systems.

LQSS' proposals were intended to stress the importance of giving strong emphasis to MSS at WRC-95, in particular, and to identify the issues the FCC should explore as the United States prepares for that Conference.

The comments of numerous other parties in this proceeding confirm that the United States should take every possible step to ensure that the emphasis at WRC-95 is on consideration of allocations and ancillary actions which will facilitate introduction of MSS.

II. The Commission Should Ensure that Additional MSS Spectrum is Made Available on a Worldwide and Accelerated Basis

The Commission has received comments in overwhelming support of ensuring that the agenda for WRC-95 includes consideration of expansion of allocations for MSS, including acceleration of the date of availability of currently allocated bands. It should act to ensure that this matter is fully addressed at WRC-95.

LQSS was joined in its Comments supporting increased availability of spectrum for MSS by the American Mobile Satellite Corporation ("AMSC"), Comsat Mobile Communications ("Comsat Mobile"), Motorola, Inc. ("Motorola"), TRW Inc. ("TRW"), Constellation Communications, Inc. ("Constellation"), and the International Small Satellite Organization (ISSO). The universal focus of these comments was on addressing the projected significant requirements for MSS. These commenters agree with LQSS that the United States should seek to advance the date of availability for MSS of frequency bands allocated for MSS, to expand all MSS allocations for worldwide use, and to upgrade secondary MSS allocations to primary. These actions would be quite significant and extremely helpful towards providing the spectrum needed for second generation MSS systems.

Advancing the availability dates for MSS allocations would be a particularly important WRC agenda item. As Motorola (at pp. 8-9) and Comsat Mobile (at pp. 4-5) stated in their comments, MSS systems must begin planning satellite systems several years in advance of implementation. Only if spectrum availability is known with some certainty can the system operators have the information they need to proceed. Therefore, it is critical that the Commission take action now to ensure that there is sufficient lead time available to permit implementation.

A number of commenting parties, including AMSC (at p. 7) and Motorola (at p. 8), propose that future MSS allocations be generic. AMSC (at p. 7) also asks the Commission to propose that the U.S. again seek to have generic MSS extended to the 1525-1559 MHz and 1626.5 -1660.5 MHz bands. In contrast, ARINC opposes the extension of generic allocations in these bands.¹

Despite the prior inability of the U.S. to achieve generic allocations in these bands at past conferences, LQSS supports the principle of generic MSS in all bands in which MSS is allocated. ARINC's position, stemming from narrow self-interest, should be rejected. As the Commission has learned during coordinations of the AMSC system with those of other countries and with that of INMARSAT, additional spectrum available on a generic basis can facilitate accommodation of multiple systems.

Designation of MSS allocations as "generic" should not, however, imply that AMSC is entitled to access to all MSS bands.² The Commission should clarify that AMSC's MSS monopoly in the United States applies only to the original bands in which it was authorized to

¹ See, Comments of Aeronautical Radio, Inc., at 3.

² See, Letter of Constellation Communications to FCC, July 14, 1993. Constellation's letter suggested that the Commission resolve "AMSC's continuing claims that it is entitled to all additional MSS spectrum because it has been designated as the sole domestic MSS licensee and because of international frequency coordination problems in the upper MSS L-band."

operate.³ However, in order to provide maximum flexibility for future MSS systems, the United States should take the position that MSS allocations should be generic.

III. The Issue of Coordination of MSS Systems with Terrestrial Systems Should Not Be Addressed at World Radiocommunication Conferences

Two parties in this proceeding ask the Commission to apply restrictions on the implementation of MSS. The Utilities Telecommunication Council (UTC) (at p. 3) suggests that MSS systems, first, should not be permitted to operate in the 2 GHz band, or if they are permitted, they should "adhere to the transition framework adopted in ET Docket No. 92-9, Emerging Technologies," with regard to existing terrestrial fixed services now operating in the band. First, UTC's suggestion is inappropriate in this proceeding. UTC will have the opportunity to make its arguments concerning operation of MSS in the 2 GHz bands at such time as the FCC considers 2 GHz spectrum allocations for the United States.

Second, the power-flux density limits applicable to MSS systems address protection of fixed services. UTC provides no discussion of what an appropriate PFD limit would be for MSS systems operating at 2 GHz.⁴ Third, the technical coordination of MSS with terrestrial fixed systems should more appropriately be addressed, initially as a domestic matter and then within the Radiocommunication Sector Study Groups. Radiocommunication Sector Task Group 12/4 currently is considering this issue.

~~It is noted that fixed services will have to operate in the 2 GHz band and that MSS systems~~

The Wireless Cable Association ("WCA") asks the Commission to ensure that wireless cable systems are protected from MSS systems operating in the 2483.5-2500 MHz and other frequency bands. This matter should be addressed in the Commission's proceeding concerning the adoption of the domestic allocation of this band.⁵ WCA was a member of the Commission's MSS above 1 GHz Negotiated Rulemaking Committee and, in that role, had full opportunity to explore and inform the Commission as to any possible impact of MSS systems on ITFS and MDS systems. In this regard, it should be noted that the NRM Committee's Report states that, "it may be concluded that out-of-band interference from MSS downlinks into FS above 2500 MHz is not a problem."⁶ The analysis of the Negotiated Rulemaking Committee was that it was more likely that MDS transmitters would interfere with MSS.⁷

As discussed above, the proposals of UTC and WCA should be addressed in fora other than preparations for World Radiocommunication Conferences, i.e., the proceedings concerning domestic allocations for MSS. To assist in developing service without delay, both entities, however, could consider whether they have specific proposals regarding PFD and uplink e.i.r.p. density limits for future MSS allocations in the 2 GHz band which they could then put forward in appropriate domestic proceedings.

IV. The Commission Should Ensure that Feeder Link Spectrum Is Included In Future WRC Agendas

Of critical importance to the near-term and future growth of MSS systems, particularly non-geostationary MSS systems, is availability of feeder link spectrum. Many commenting parties, including both Comsat World Systems and Comsat Mobile, Motorola, Constellation and

⁵ See, Amendment of Section 2.106 of the Commission's Rules to Allocate the 1610-1626.5 MHz and the 2483.5-2500 MHz Bands for use by the Mobile Satellite Service, Including Non-Geostationary Satellites, 7 FCC Rcd. 6414 (1992).

⁶ MSS Above 1 GHz Negotiated Rulemaking Committee Report, April 6, 1993, Annex 2, p. 18.

⁷ Id.

ISSO, joined LQSS in raising this issue. LQSS and Constellation both specifically requested consideration of the 5150-5250 MHz band for feeder links for MSS as well as RDSS systems.

These commenters, except Motorola, support the inclusion of feeder link allocations on the agenda of WRC-95. Motorola (at p. 6) states that the matter, although important, can wait until WRC-97. ARINC (at pp. 5-6) specifically opposes the consideration of the 5150-5250 MHz band for feeder links, stating that the studies of aeronautical radionavigation requirements for that band have not been concluded. Contrary to the ARINC view, Constellation (at p. 2) states that the "5150-5250 MHz band is an attractive band for LEO feeder links because of its current light use for either terrestrial or space communications."

The Commission should reject ARINC's position with respect to this band, particularly since it appears to be based on no more than the aviation community's desire to retain unused spectrum allocations for speculative future use. The aviation community's failure to complete the studies called for in Recommendation 607⁸ at the 1987 Mobile WARC should not provide a rationale for deferring consideration of this band for MSS feeder links.

Second only in importance to the availability of user link spectrum for MSS is availability of feeder link spectrum. It is critical to resolve utilization of FSS spectrum for feeder links by non-GSO systems in the near future. The matter currently is under study in Radiocommunication Sector Study Groups. LQSS, as well as Comsat Mobile, TRW, Constellation and ISSO, ask that the matter of feeder links for MSS systems be addressed at the earliest possible date. Such action will pave the way for implementation of United States as well as other systems and can reduce the potential for complex coordinations with fixed-satellite systems.

⁸ Recommendation 607 asks for a study of aviation requirements in the 5000-5250 MHz band with a view towards permitting the band to be shared with mobile services.

V. The United States Must Ensure that Various Footnotes Relating to MSS Are Addressed at Near-term WRCs

LQSS was joined by Constellation, TRW and Motorola in asking the Commission to ensure that Radio Regulation provisions regarding MSS are addressed in the near future. Of particular concern to many parties are the perceived ambiguities of Radio Regulation 731E. As Constellation (at p. 2) states:

provisions which will enable the prompt introduction of MSS systems and allow for their growth to accommodate the projected demand for such service.

Respectfully submitted,

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I, Andrew F. Taylor, hereby certify that on this 29th day of July, 1993, copies of the foregoing "Reply Comments of Loral Qualcomm Satellite Services, Inc." were mailed, postage prepaid, to the following:

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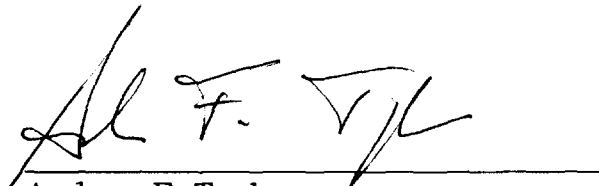
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